156822

PROJECT VARIANCE DATE: 06/24/85

AR NO.: 3808
CEA NO: 3808
VARIANCE NO: 3

CORPORATE ENGINEERING DEPARTMENT

TITLE: Main South Trunk Sewer ___ PROJECT SCOPE/PREMISES

LOCATION: W.G. Krummrich X EXECUTION

To:					
	D.R. Bowers	CS6G	J.W. Molloy	1740
	J.O. Bright	CS6G	R.L. Nelson	1740
	E.R. Hartman	CS6G	M.E. Nolan	F1EA
	R.M. Kountz	F2ED	C.H. Thurman	B2SE
	F.A. Mayse	CS6G	R.L. Wiese	CS6G

PROJECT SUMMARY

This project will install a new 42" diameter trunk sewer to carry all of the plant sewer load now carried by the two Sauget Village sewers at the south end of the Krummrich plant.

Construction is to be executed while maintaining plant operations and minimizing downtime on production units while maintaining dewatering wells pump effluent below maximum quantities established by waste treatment facilities.

DESCRIPTION

This variance updates the current forecasted mechanical completion date for cost effective execution and the forecasted project costs.

JUSTIFICATION

Initial field work was delayed and adversely affected by a number of factors:

- As addressed in Variance #2, extra time was taken to revise design and rebid construction work to obtain a lower value for construction costs and a GMP contract. The initial start of the project in the field was delayed by unresolved labor contracts in Metro East.
- A different joint material for the Vitrified Clay Pipe (VCP) had to be evaluated, selected, and field tested after the original specified asbestos material was taken off the market.

APPROVAL: G.A. Grundmann 6/26/85
G.A. Grundmann Date
Project Manager

F.A. Mayse 6/26/85
F.A. Mayse Date
Mgr. SPEO, MIC Engrg.

APPROVAL: D.R. Bowers 6/26/85
D.R. Bowers Date
Mgr. Engrg., MIC Engrg.

J.O. Bright 6/28/85
J.O. Bright Date
Director, MIC Engrg.

WGK 4084712

JUSTIFICATION (continued)

- Schedules were revised to insure that the plant would be able to maintain normal operations during the construction period to the maximum extent possible.
- A large corrugated tunnel under the railroad tracks supplying CL_2 to ACL was deemed necessary.
- Benzene underground seepage, benzene truck unloading and encountering buried drums have shut the field work down on several occasions.
- Actual field preparation of joints, joint installation, curing and pressure testing requiring more time than originally anticipated based on actual demonstrated field work.

FINANCIAL SUMMARY $K

	AR	EFC	THIS VARIANCE	NEW EFC	(OVER)/UNDER AR
CAPITAL	5,000	5,000	200	5,200	(200)
EXPENSE	700	1,200	0	1,200	(500)

The estimated accuracy of this variance is ±10%.

EXPENSE

Although the expense costs have remained unchanged in this variance, it is important to point out that the project still has potential exposure to increased costs for disposal of contaminated soil. There is no way to accurately estimate the amount of contaminated soil that may be excavated from the trench throughout the remainder of the project. If the soil is identified as contaminated by the plant laboratory personnel, it must receive special handling and some may have to be trucked to an approved landfill.

Consequently, comprehensive dirt handling and testing control procedures have been instituted to insure that any costs for handling and/or shipping contaminated dirt out of the plant are absolutely justified and minimized.

EFFECT ON PROJECT SCHEDULE

A comprehensive schedule update has been recently completed with extensive participation by engineering, field supervision, plant, and contractor personnel. Most importantly, this update is based on actual demonstrated field work to date. The primary bases of this update are to keep the plant

EFFECT ON PROJECT SCHEDULE (continued)

running as smoothly as possible, minimize the amount of open trench and consequential plant disruption, insure a quality installation, minimize the risks, and operate the dewatering well pumps within limitations set by the regional water treatment plant. This schedule update incorporates the most cost effective methods of construction to meet the project objectives and is now forecasted to be completed between August and December 1986, subject to weather and any other unforseen complications.

Gordon A. Grundmann
Project Manager

1135C

WGK 4084714

VARIANCE DETAIL SHEET

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Title Main South Trunk Sewer — Date 06/24/85

No.	CL*	Description	Amount $k	EFC $k	Date Initiated	Date Approved	Comment
1	1	Sewer routing revised.	0 C 0 E	5,000 C 700 E	09/13/83	09/25/83	
2	2	Documents budget Estimate and revises completion date.	0 C 500 E	5,000 C 1,200 E	08/21/84	09/05/84	
3	2	Updates mechanical completion date for cost effective execution.	200 C 0 E	5,200 C 1,200 E	06/24/85		
			C E	C E			
			C E	C E			
			C E	C E			
			C E	C E			
			C E	C E			
			C E	C E			
			C E	C E			

*CL = Classification of Variances:
1 = Project Scope/Premises
2 = Execution

C = Capital
E = Expense

08102

MGK 4084715